

NAME \_\_\_\_\_

DATE ► \_\_\_\_\_

This sample is gray and white. The white part flakes off. The gray part is hard.	This sample is pink and brown. Only the pink part bubbles when I put weak acid on it.	This sample looks brown. It has sharp edges. The streak color is red.	This sample has two streaks. One streak is white and one streak is brown.
1.	2.	3.	4.

1. Dana is recording properties of rocks and minerals in her science notebook. Which describes a mineral?

- A. 1
- B. 2
- C. 3
- D. 4

2. Which of these scientists study the Earth and its rocks?

- A. A biologist
- B. A geologist
- C. A meteorologist
- D. An entomologist

3. Our Earth is made up of solids, liquids and gases. Choose the name that geologists use to identify these things.

- A. Earth materials
- B. Earth minerals
- C. Earth rocks
- D. Earth elements

4. Kate collects rocks, gems and crystals. Which is made up of 2 or more different minerals?

- A. Crystal
- B. Gem
- C. Mineral
- D. Rock

5. Caleb sorts minerals from softest to hardest. Which tools are most helpful?

- A. A balance scale and gram weights
- B. A crystal identification key and notebook
- C. A penny and a paper clip
- D. A 25 ml syringe and water

Tuesday 10:15	Tuesday 10:15	Tuesday 10:15	Tuesday 10:15
Precious stones	Sand	Size	Floors
Gems	Humus	Texture	Monuments
Minerals	Clay	Shape	Buildings
1.	2.	3.	4.

6. Which notebook entry lists properties of rocks?

- A. 1
- B. 2
- C. 3
- D. 4

7. Meg broke apart a rock. She sorted the pieces into like piles. What evidence is Meg collecting?

- A. Minerals break up to make new minerals
- B. Rocks are made up of different materials
- C. Rocks break apart easily
- D. Scientists break up minerals to make rocks

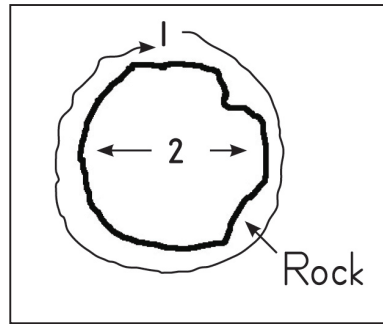
8. Limestone is a common building material made up of calcite. Today, limestone buildings are being damaged. Which of these is the cause?

- A. Acid rain
- B. Damaging winds
- C. Forest fires
- D. Hurricanes

9. Tourists visit the NC mountains to mine special minerals. What are the tourists mining?

- A. Building materials
- B. Fossils
- C. Gem stones
- D. Salt

Look at the drawing.



Dave wraps a string around a rock. Then he **measures** the length of the string with a **metric ruler**. He records his results.

10. What measurement is Dave finding?

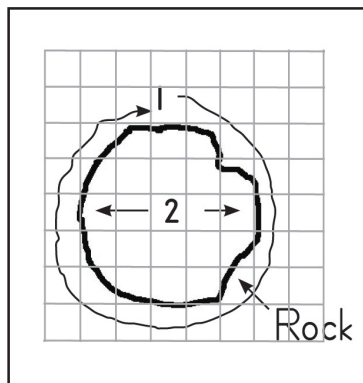
- A. Circumference
- B. Depth
- C. Diameter
- D. Height

11. What unit of measurement is used?

- A. Centimeters
- B. Grams
- C. Inches
- D. Ounces

12. Dave measures across for measurement number 2. Which measurement is Dave finding?

- A. Circumference
- B. Depth
- C. Diameter
- D. Height



13. Amber put the rock on centimeter graph paper and traced the shape. What is the measurement for distance 2?

- A. 5 cm
- B. 5 in
- C. 8 cm
- D. 8 in

Andrew recorded the properties of a mineral in his science notebook.  
Use the diagram to answer questions 14, 15, 16 and 17.

Andrew's Science Notebook

14. What sample is Andrew studying?

- A. Glassy
- B. Cube
- C. Fluorite
- D. Smooth

15. Which describes luster?

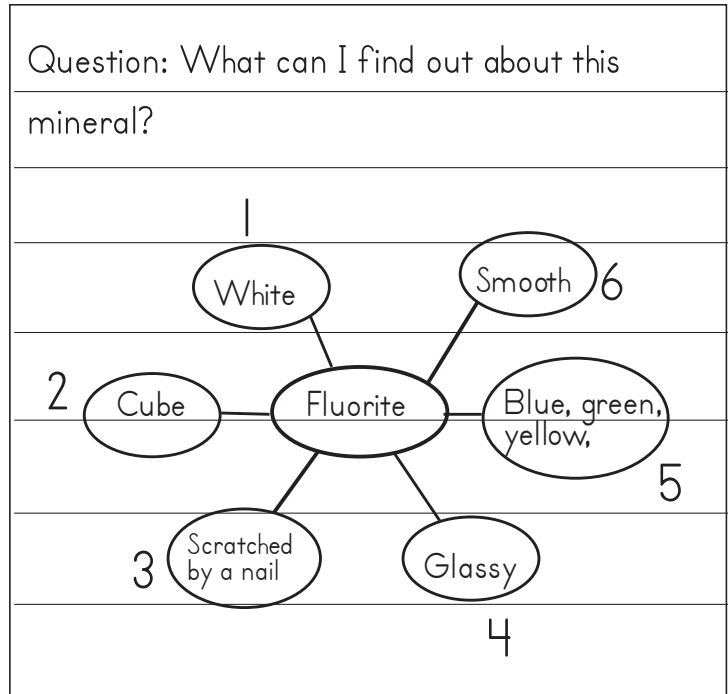
- A. 1
- B. 4
- C. 5
- D. 6

16. Which describes hardness?

- A. 2
- B. 3
- C. 4
- D. 6

17. Which describes shape and texture?

- A. 2 and 4
- B. 2 and 6
- C. 3 and 4
- D. 4 and 6



18. Adrian is testing a set of minerals for hardness. How can a hand lens help with the test?

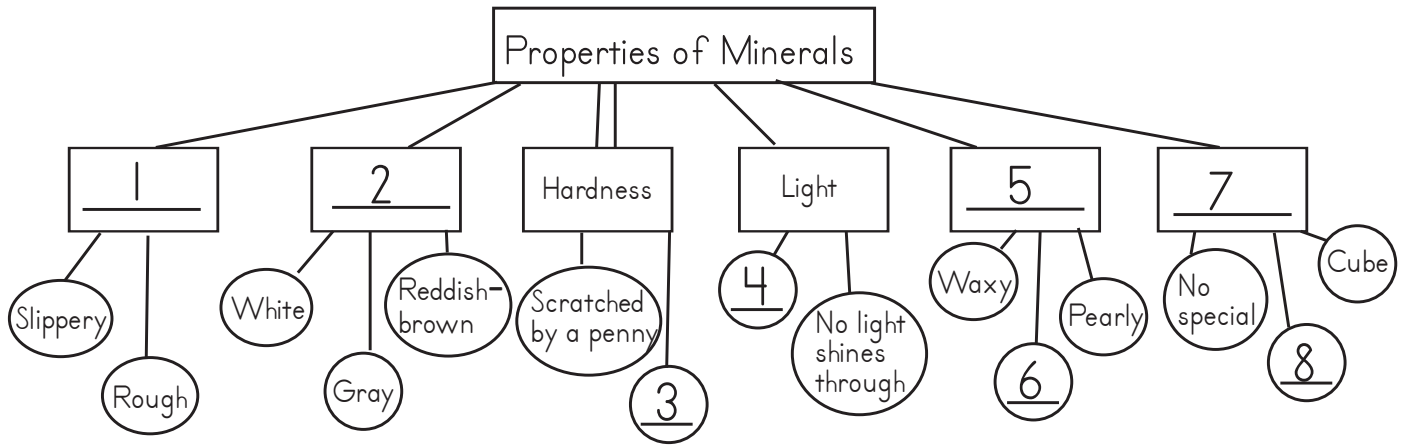
- A. Look at the color of mineral
- B. Look at the light that passes through
- C. Look at the mineral's texture
- D. Look to see if the mineral is really scratched

19. Geologists often test rocks to see if they have calcite in them. Why is that?

- A. Calcite can be scratched with a penny
- B. Calcite comes in so many different colors
- C. Calcite is found in all earth materials
- D. Calcite is one of the most common minerals

20. Mt. Airy, NC, is the site of the largest open-faced granite quarry in the world. Which describes the most common use of NC granite?

- A. Granite is used on playgrounds
- B. Granite is used to build buildings
- C. Granite is used to make NC bricks
- D. Granite is used to pave roads



Look at the diagram.

Use the diagram to answer questions 21, 22, 23 and 24.

21. Which is the best choice for space 1?

- A. Luster
- B. Magnetism
- C. Shape
- D. Texture

22. Gray, white and reddish brown are colors. Color is not the property that belongs in blank 2. Why?

- A. Minerals are usually white and reddish-brown
- B. Minerals are identified using streak color
- C. Minerals change color in bright light
- D. Minerals are more than one color

23. What is the best choice for the word, “shape”?

- A. 1
- B. 3
- C. 7
- D. 8

24. Which is the best choice for space 6?

- A. Gray
- B. Magnetic
- C. Metallic
- D. Rough

25. Amy and Mia are sorting rocks from heaviest to lightest. Which of these tools would be most helpful?

- A. Balance scale
- B. Hand lens
- C. Meter stick
- D. Stopwatch

26. Jon is testing rock samples for calcite. Which is a positive test for calcite?

- A. Bubbles form on the rock
  - B. Little holes form on the rock
  - C. Powder forms on the rock
  - D. The rock doesn't dry
- 

27. Some new school buses are powered by electricity. What is the connection between fossil rich shale and the fuel for an old school bus?

- A. Fossils are collected to make gasoline
  - B. Gasoline is made from finely ground rock
  - C. Oil and natural gas are found between layers of shale
  - D. Shale is a rock not a fuel source
- 

28. Martha mixed a mystery powder in water and the powder seemed to disappear. What happened to the powder?

- A. It became bubbles
  - B. It turned yellow
  - C. It dissolved
  - D. It evaporated
- 

29. What is special about a crystal?

- A. Crystals are always very clear
  - B. Crystals are always white
  - C. Crystals are worth a lot of money
  - D. Crystals have their own shape and pattern
- 

30. Lexi has 3 dishes with 3 different crystals in them. How can she find out what the crystals are?

- A. Look closely at the sharp edges
  - B. Match up the light colors
  - C. Record the number of crystals
  - D. Use a key to identify the shapes
- 

31. Tara is studying a set of minerals. She wants to find all the calcite samples in the set. Her friend Meg is giving her clues. Which clue is the most helpful?

- A. Use a balance scale
- B. Use a fingernail
- C. Use a flashlight
- D. Use a weak acid test